

ABSTRACT OF THE DISCLOSURE

A method and apparatus for manipulating work queue elements via a hardware adapter and a software driver. The software driver is configured to cause a plurality of work queue elements to be stored in a queue pair including a plurality of storage locations. Each of the plurality of storage locations includes an indicator indicating whether a corresponding work queue element has been completed. The hardware adapter is configured to select one of the plurality of storage locations and to service a corresponding one of the plurality of work queue elements, and in response to completion of a task associated with the corresponding work queue element, to cause the indicator to indicate that the corresponding work queue element has been completed. Additionally, the software driver is configured to cause a new work queue element to be stored in the selected storage location in response to detecting that the indicator indicates that the corresponding work queue element has been completed.